### **Subpart D—Construction**

#### §195.200 Scope.

This subpart prescribes minimum requirements for constructing new pipeline systems with steel pipe, and for relocating, replacing, or otherwise changing existing pipeline systems that are constructed with steel pipe. However, this subpart does not apply to the movement of pipe covered by § 195.424.

# § 195.202 Compliance with specifications or standards.

Each pipeline system must be constructed in accordance with comprehensive written specifications or standards that are consistent with the requirements of this part.

#### §195.204 Inspection—general.

Inspection must be provided to ensure the installation of pipe or pipeline systems in accordance with the requirements of this subpart. No person may be used to perform inspections unless that person has been trained and is qualified in the phase of construction to be inspected.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33397, June 28, 1994]

# § 195.205 Repair, alteration and reconstruction of aboveground breakout tanks that have been in service.

- (a) Aboveground breakout tanks that have been repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.
- (b) After October 2, 2000, compliance with paragraph (a) of this section requires the following for the tanks specified:
- (1) For tanks designed for approximately atmospheric pressure constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C, repair, alteration, and reconstruction must be in accordance with API Standard 653.
- (2) For tanks built to API Specification 12F or API Standard 620, the repair, alteration, and reconstruction

must be in accordance with the design, welding, examination, and material requirements of those respective standards.

(3) For high pressure tanks built to API Standard 2510, repairs, alterations, and reconstruction must be in accordance with API 510.

[Amdt. 195-66, 64 FR 15935, Apr. 2, 1999]

#### § 195.206 Material inspection.

No pipe or other component may be installed in a pipeline system unless it has been visually inspected at the site of installation to ensure that it is not damaged in a manner that could impair its strength or reduce its serviceability.

### § 195.208 Welding of supports and braces.

Supports or braces may not be welded directly to pipe that will be operated at a pressure of more than 100 p.s.i. (689 kPa) gage.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–63, 63 FR 37506, July 13, 1998]

#### § 195.210 Pipeline location.

- (a) Pipeline right-of-way must be selected to avoid, as far as practicable, areas containing private dwellings, industrial buildings, and places of public assembly.
- (b) No pipeline may be located within 50 feet (15 meters) of any private dwelling, or any industrial building or place of public assembly in which persons work, congregate, or assemble, unless it is provided with at least 12 inches (305 millimeters) of cover in addition to that prescribed in § 195.248.

[Amdt. 195–22, 46 FR 39360, July 27, 1981, as amended by Amdt. 195–63, 63 FR 37506, July 13, 1998]

### § 195.212 Bending of pipe.

- (a) Pipe must not have a wrinkle bend.
- (b) Each field bend must comply with the following:
- (1) A bend must not impair the serviceability of the pipe.
- (2) Each bend must have a smooth contour and be free from buckling, cracks, or any other mechanical damage.

#### § 195.214

- (3) On pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend unless—
- (i) The bend is made with an internal bending mandrel; or
- (ii) The pipe is  $12\frac{3}{4}$  in (324 mm) or less nominal outside diameter or has a diameter to wall thickness ratio less than 70
- (c) Each circumferential weld which is located where the stress during bending causes a permanent deformation in the pipe must be nondestructively tested either before or after the bending process.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33396, June 28, 1994; Amdt. 195–63, 63 FR 37506, July 13, 1998]

#### §195.214 Welding: General.

- (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify the procedure shall be determined by destructive testing.
- (b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

[Amdt. 195–38, 51 FR 20297, June 4, 1986]

#### § 195.216 Welding: Miter joints.

A miter joint is not permitted (not including deflections up to 3 degrees that are caused by misalignment).

### § 195.222 Welders: Qualification of welders.

Each welder must be qualified in accordance with section 3 of API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code, except that a welder qualified under an earlier edition than listed in §195.3 may weld but may not requalify under that earlier edition.

[Amdt. 195–32, 49 FR 36860, Sept. 20, 1984, as amended by Amdt. 195–38, 51 FR 20297, June 4, 1986]

#### § 195.224 Welding: Weather.

Welding must be protected from weather conditions that would impair the quality of the completed weld.

### §195.226 Welding: Arc burns.

- (a) Each arc burn must be repaired.
- (b) An arc burn may be repaired by completely removing the notch by grinding, if the grinding does not reduce the remaining wall thickness to less than the minimum thickness required by the tolerances in the specification to which the pipe is manufactured. If a notch is not repairable by grinding, a cylinder of the pipe containing the entire notch must be removed.
- (c) A ground may not be welded to the pipe or fitting that is being welded.

## § 195.228 Welds and welding inspection: Standards of acceptability.

- (a) Each weld and welding must be inspected to insure compliance with the requirements of this subpart. Visual inspection must be supplemented by nondestructive testing.
- (b) The acceptability of a weld is determined according to the standards in section 6 of API Standard 1104. However, if a girth weld is unacceptable under those standards for a reason other than a crack, and if the Appendix to API Standard 1104 applies to the weld, the acceptability of the weld may be determined under that appendix.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33397, June 28, 1994]

# § 195.230 Welds: Repair or removal of defects.

- (a) Each weld that is unacceptable under §195.228 must be removed or repaired. Except for welds on an offshore pipeline being installed from a pipelay vessel, a weld must be removed if it has a crack that is more than 8 percent of the weld length.
- (b) Each weld that is repaired must have the defect removed down to sound metal and the segment to be repaired must be preheated if conditions exist which would adversely affect the quality of the weld repair. After repair, the segment of the weld that was repaired